856 Infor Supplier Exchange – Generic Ship Notice – Manifest / Version 004010 (published into Infor Supplier Exchange)

Functional Group ID=SH

Introduction

This Draft Standard for Trial Use contains the format and establishes the data contents of the Ship Notice/Manifest Transaction Set (856) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to list the contents of a shipment of goods as well as additional information relating to the shipment, such as order information, product description, physical characteristics, type of packaging, marking, carrier information, and configuration of goods within the transportation equipment. The transaction set enables the sender to describe the contents and configuration of a shipment in various levels of detail and provides an ordered flexibility to convey information. The sender of this transaction is the organization responsible for detailing and communicating the contents of a shipment, or shipments, to one or more receivers of the transaction set. The receiver of this transaction set can be any organization having an interest in the contents of a shipment or information about the contents of a shipment.

Heading:

	Pos. No.	Seg. ID	Name	Req. Des.	Loop Max.Use	Notes and Repeat	Comments
M	010	ST	Transaction Set Header			M	1
M	020	BSN	Beginning Segment for Ship Notice			M	1
	040	DTM	Date/Time Reference			O	10

Detail:

	Pos. No.	Seg. ID	Name	Req. Des.	Loop Max.Use	Notes and Repeat	Comments
			LOOP ID – HL – Shipment				200000
M	010	HL	Hierarchical Level			M	1
	080	MEA	Measurements			O	40
	120	TD5	Carrier Details (Routing Sequence/Transit Time)			O	12
	130	TD3	Carrier Details (Equipment)			O	12
	150	REF	Reference Information			O	>1
			LOOP ID - N1				200
	220	N1	Name			O	1

M	010	HL	Hierarchical Level	M	1	
	020	LIN	Item Identification	O	1	
	030	SN1	Item Detail (Shipment)	O	1	
	050	PRF	Purchase Order Reference	O	1	
	080	MEA	Measurements	O	>1	
	150	REF	Reference Identification	O	>1	
			LOOP ID - CLD		200	
	170	CLD	Load Detail	O	>1	
	180	REF	Reference Information	O	>1	
	300	ETD	Excess Transportation Detail	O	1	

Summary:

	Pos. No.	Seg. ID	Name	Req. Des.	Loop Max.Use	Notes and Repeat	Comments
	010	CTT	Transaction Totals	O	1		n1
M	020	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. Number of line items (CTT01) is the accumulation of the number of HL segments. If used, hash total (CTT02) is the sum of the value of units shipped (SN102) for each SN1 segment.

Transaction Set Comments

1. The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.

The 856 ASN is the electronic representation of the supplier's physical shipment.
The 856 uses hierarchal loops (HLs) to represent the physical shipment in electronic form. Hierarchal loops can be designated with a function by assigning the HL segment hierarchal level code HL03 to a specific value. The HL03 values used in the Infor Supplier Exchange implementation are S, O, T, and I.
HL03 Explanations:

- S = HL Shipment (only one HLS per 856)
- O = HL Order (as Orders on the shipment, the HLO loops would repeat as children of the HLS). The HLO level represents the actual item being shipped and is required when containers are being used.
- T = HL Tare (Pallet/Master container level, the HLT loops would repeat as children of the HLO)

- I = HL Line Item (The HLI level represents a detail container of a pallet/master (child of HLT) or a loose/single container of the order (child of HLO). If no containers are being used, the HLI can be a child of the Shipment, to indicate the actual item being shipped.

The HL loops can be sent in the following nested combinations:
S-O: shipment header, shipped item
S-O-I: shipment header, shipped item, loose container
S-O-T-I: shipment header, shipped item, master container, detail container of master
S-O-I-T-I: shipment header, shipped item, loose container, master container, detail container of master
S-I: shipment header, shipped item

Segment: **ST** **Transaction Set Header**
Position: 010
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of a transaction set and to assign a control number
Syntax Notes:
Semantic Notes: The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
M	**ST01**	**143**	**Transaction Set Identifier Code**		**M**	**ID 3/3**
			Code uniquely identifying a Transaction Set			
			856	Ship Notice/Manifest		
M	**ST02**	**329**	**Transaction Set Control Number**		**M**	**AN 4/9**
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set			

Segment: **BSN** **Beginning Segment for Ship Notice**
Position: 020
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To transmit identifying numbers, dates, and other basic data relating to the transaction set
Semantic Notes: **1** BSN03 is the date the shipment transaction set is created.
2 BSN04 is the time the shipment transaction set is created.
3 BSN06 is limited to shipment related codes.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
M	**BSN01**	**353**	**Transaction Set Purpose Code**		**M**	**ID 2/2**
			Code identifying purpose of transaction set			
			00	Original		
			01	Cancellation		

M	**BSN02**	**396**	**Shipment Identification**	**M**	**AN 2/30**
			A unique control number assigned by the original shipper to identify a specific shipment		
M	**BSN03**	**373**	**Date**	**M**	**DT 8/8**
			Date expressed as CCYYMMDD		
M	**BSN04**	**337**	**Time**	**M**	**TM 4/8**
			Time expressed in 24-hour clock time as follows: HHMMSS, where H = hours (00-23), M = minutes (00-59) and S = integer seconds (00-59)		

Segment: **DTM** **Date/Time Reference**
Position: 040
Level: Heading
Usage: Optional
Max Use: 10
Purpose: To specify pertinent dates and times
Syntax Notes: **1** At least one of DTM02 DTM03 or DTM05 is required.
2 If DTM04 is present, then DTM03 is required.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
M	**DTM01**	**374**	**Date/Time Qualifier**		**M**	**ID 3/3**
			Code specifying type of date or time, or both date and time			
			011	Shipped		
			017	Estimated Delivery		
	DTM02	**373**	**Date**		**X**	**DT 8/8**
			Date expressed as CCYYMMDD			
	DTM03	**337**	**Time**		**X**	**TM 4/8**
			Time expressed in 24-hour clock time as follows: HHMMSS, where H = hours (00-23), M = minutes (00-59) and S = integer seconds (00-59)			

Segment: **HL** **Hierarchical Level - Shipment**
Position: 010
Loop: HL Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments
Comments:

1. The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
   The HL segment defines a top-down/left-right ordered structure.
2. HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
3. HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
4. HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, tare, or item-level information.
5. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
M	**HL01**	**628**	**Hierarchical ID Number**		**M**	**AN 1/12**
			A unique number assigned by the sender to identify a particular data segment in a hierarchical structure			
	HL02	**734**	**Hierarchical Parent ID Number**		**O**	**AN 1/12**
			Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to			
M	**HL03**	**735**	**Hierarchical Level Code**		**M**	**ID 1/2**
			Code defining the characteristic of a level in a hierarchical structure			
			S	Shipment		

Segment: **MEA** **Measurements**
Position: 080
Loop: HL Mandatory
Level: Detail
Usage: Optional
Max Use: 40
Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)
Syntax Notes: At least one of MEA03 MEA05 MEA06 or MEA08 is required.
Semantic Notes: MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.
Comments: When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
	MEA01	**737**	**Measurement Reference ID Code**		**O**	**ID 2/2**
			Code identifying the broad category to which a measurement applies			
			PD	Physical Dimensions		
	MEA02	**738**	**Measurement Qualifier**		**O**	**ID 1/3**
			Code identifying a specific product or process characteristic to which a measurement applies			
			G	Gross Weight		
			N	Actual Net Weight		
			T	Tare Weight		
	MEA03	**739**	**Measurement Value**		**X**	**R 1/20**
			The value of the measurement			
	MEA04	**C001**	**Composite Unit of Measure**		**X**	
			To identify a composite unit of measure (See Figures Appendix for examples of use)			
M	**C00101**	**355**	**Unit or Basis for Measurement Code**		**M**	**ID 2/2**
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken			
			KG	Kilogram		
			LB	Pound		

Segment: **TD5** **Carrier Details (Routing Sequence/Transit Time)**
Position: 120
Loop: HL Mandatory
Level: Detail
Usage: Optional
Max Use: 12
Purpose: To specify the carrier and sequence of routing and provide transit time information
Syntax Notes:

1. At least one of TD502 TD504 TD505 TD506 or TD512 is required.
2. If TD502 is present, then TD503 is required.

Semantic Notes: TD515 is the country where the service is to be performed.
Comments: When specifying a routing sequence to be used for the shipment movement in lieu of specifying each carrier within the movement, use TD502 to identify the party responsible for defining the routing sequence, and use TD503 to identify the actual routing sequence, specified by the party identified in TD502.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes		
TD501	**133**	**Routing Sequence Code**		**O**	**ID 1/2**
		Code describing the relationship of a carrier to a specific shipment movement			
		B	Origin/Delivery Carrier (Any Mode)		
TD502	**66**	**Identification Code Qualifier**		**X**	**ID 1/2**
		Code designating the system/method of code structure used for Identification Code (67)			
		2	Standard Carrier Alpha Code (SCAC)		
TD503	**67**	**Identification Code**		**X**	**AN 2/4**
		Code identifying a party or other code			
TD504	**91**	**Transportation Method/Type Code**		**X**	**ID 1/2**
		Code specifying the method or type of transportation for the shipment			
		A	Air		
		AC	Air Charter		
		AE	Air Express		
		C	Consolidation		
		CE	Customer Pickup / Customer's Expense		

E	Expedited Truck
L	Contract Carrier
LT	Less Than Trailer Load (LTL)
M	Motor (Common Carrier)
MP	Motor (Package Carrier)
P	Private Carrier
PT	Pooled Truck
R	Rail
RR	Roadrailer
	Used for shipments that travel by roadrailer, i.e., a multimodal rail/highway trailer
S	Ocean
SR	Supplier Truck
W	Inland Waterway

Segment: **TD3** **Carrier Details (Equipment)**
Position: 130
Loop: HL Mandatory
Level: Detail
Usage: Optional
Max Use: 12
Purpose: To specify transportation details relating to the equipment used by the carrier
Syntax Notes: **1** Only one of TD301 or TD310 may be present.
2 If TD302 is present, then TD303 is required.
3 If TD304 is present, then TD305 is required.
4 If either TD305 or TD306 is present, then the other is required.
Semantic Notes:
Comments:

Data Element Summary

Ref. Des.	Data Element	Name	Attributes		
TD301	**40**	**Equipment Description Code**		**X**	**ID 2/2**
		Code identifying type of equipment used for shipment			
		AP	Aircraft		
		RR	Rail Car		
		TL	Trailer (not otherwise specified)		
		VE	Vessel, Ocean		
		VL	Vessel, Lake		
TD302	**206**	**Equipment Initial**		**O**	**AN 1/4**
		Prefix or alphabetic part of an equipment unit's identifying number			
TD303	**207**	**Equipment Number**		**X**	**AN 1/10**
		Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred)			

Segment: **REF** **Reference Identification**
Position: 260
Loop: N1 Optional
Level: Detail
Usage: Optional
Max Use: 12
Purpose: To specify identifying information

Data Element Summary

Ref. Des.	Data Element	Name	Attributes		
M	**REF01**	**128**	**Reference Identification Qualifier**	**M**	**ID 2/3**
			Code qualifying the Reference Identification		
			BM Bill of Lading Number		
			CN Carrier's Reference Number (PRO/Invoice)		
			RC Rail Routing Code		
			DK Dock		
			SI Shipment Number		
			OL Shipment Number		
			PK Shipment Number		
			MB Shipment Number		
	REF02	**127**	**Reference Identification**	**X**	**AN 1/30**
			The value of the indicated qualifier		

****Only one of the 'SI', 'OL', 'PK', or 'MB' qualifiers is expected****

Segment: **N1** **Name**
Position: 220
Loop: N1 Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
Syntax Notes: **1** At least one of N102 or N103 is required.
2 If either N103 or N104 is present, then the other is required.
Comments: **1** The "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

Data Element Summary

Ref. Des.	Data Element

	Des.	Element	Name	Attributes		
M	**N101**	**98**	**Entity Identifier Code**		**M**	**ID 4/4**
			Code identifying an organizational entity, a physical location, property or an individual			
			MI	Planning Schedule/Material Release Issuer		
			SF	Ship From		
			ST	Ship To		
			SU	Supplier/Manufacturer		
	N102	**93**	**Name**		**X**	**AN 1/30**
			Free-form name			
	N103	**66**	**Identification Code Qualifier**		**X**	**ID 1/2**
			Code designating the system/method of code structure used for Identification Code (67)			
			1	D-U-N-S Number, Dun & Bradstreet		
			92	Assigned by Buyer or Buyer's Agent		
	N104	**67**	**Identification Code**		**X**	**AN 2/30**
			Code identifying a party or other code			

*****An N1 segment must be provided for each 'MI', 'ST', and 'SU'. Only the 'SF' Supplier Ship From N1 segment is optional.*****

Segment: **HL** **Hierarchical Level – Order/Tare/Item Level**
Position: 010
Loop: HL Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments
Syntax Notes:
Semantic Notes:
Comments: **1** The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.

The HL segment defines a top-down/left-right ordered structure.

2 HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.

3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.

4 HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.

5 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
M	**HL01**	**628**	**Hierarchical ID Number**		**M**	**AN 1/12**
			A unique number assigned by the sender to identify a particular data segment in a hierarchical structure			
	HL02	**734**	**Hierarchical Parent ID Number**		**O**	**AN 1/12**
			Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to			
M	**HL03**	**735**	**Hierarchical Level Code**		**M**	**ID 1/2**
			Code defining the characteristic of a level in a hierarchical structure			
			I	Item (loose and detail container level)		
			O	Order level		
			T	Tare (master container)		

Examples:

Detail ASN With master and detail containers:
HL*1**S (shipment)
HL*2*1*O (order)
HL*3*2*T (first master container linked to order level)
HL*4*3*I (detail container linked to first pallet)
HL*5*2*T (second master container linked to order level)
HL*6*5*I (detail container linked to second master)
HL*7*5*I (detail container linked to second master)

Detail ASN With loose containers, master, and detail:
HL*1**S (shipment)
HL*2*1*O (order)
HL*3*2*I (first loose container linked to order level)
HL*4*2*I (second loose container linked to order level)
*****HL with 'I' for loose containers always come before master/detail containers*****

HL*5*3*T (first master container linked to order level)
HL*6*5*I (detail container linked to first master)
HL*7*5*I (detail container linked to first master)

Detail ASN With only loose containers:
HL*1**S (shipment)
HL*2*1*O (order)
HL*3*2*I (first loose container linked to order level)
HL*4*2*I (second loose container linked to order level)

Detail ASN With no containers, order level only:
HL*1**S (shipment)
HL*2*1*O (order)

Detail ASN With no containers, item level only:
HL*1**S (shipment)
HL*2*1*I (item)

The X12 segments available for the Order, Tare, and Item levels are all the same, but their usage may differ.

Segment: **LIN** **Item Identification**
Position: 020
Loop: HL Mandatory
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify basic item identification data
Syntax Notes: **1** If either LIN04 or LIN05 is present, then the other is required.
2 If either LIN06 or LIN07 is present, then the other is required.
3 If either LIN08 or LIN09 is present, then the other is required.
4 If either LIN10 or LIN11 is present, then the other is required.
5 If either LIN12 or LIN13 is present, then the other is required.
Semantic Notes: LIN01 is the line item identification
Comments: This segment will be required for HL-O, HL-T, and HL-I loops. The indicator that this segment is for identifying the customer part and item properties will be when LIN02 = 'BP'. Any other value in LIN02 will indicate a loose, master, or detail container. If this LIN is for the buyer part, then elements LIN03 – LIN13 will be used.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
	LIN01	**350**	**Assigned Identification**		**O**	**AN 1/20**
			Alphanumeric characters assigned for differentiation within a transaction set			
M	**LIN02**	**235**	**Product/Service ID Qualifier**		**M**	**ID 2/2**
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)			
			BP	Buyer's Part Number		
M	**LIN03**	**234**	**Product/Service ID**		**M**	**AN 1/30**
			Buyer's Part Number			
	LIN04	**235**	**Product/Service ID Qualifier**		**X**	**ID 2/2**
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)			
			PO	Purchase Order Number		
	LIN05	**234**	**Product/Service ID**		**X**	**AN 1/20**
			Purchase Order Number (when applicable)			
	LIN06	**235**	**Product/Service ID Qualifier**		**X**	**ID 2/2**
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)			
			EC	Engineering Change Level		

LIN07	**234**	**Product/Service ID**	**X**	**AN 1/20**
		Engineering Change Level (when applicable)		
LIN08	**235**	**Product/Service ID Qualifier**	**X**	**ID 2/2**
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		RY Record Keeping or Model Year		
LIN09	**234**	**Product/Service ID**	**X**	**AN 1/20**
		Model Year (if applicable)		
LIN12	**235**	**Product/Service ID Qualifier**	**X**	**ID 2/2**
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		KB Data Category Code		
		KP Kanban Plan Number		
LIN13	**234**	**Product/Service ID**	**X**	**AN 1/30**
		Pull Signal (when applicable)		

Segment: **SN1** **Item Detail (Shipment)**
Position: 030
Loop: HL Mandatory
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify line-item detail relative to shipment
Syntax Notes: **1** If either SN105 or SN106 is present, then the other is required.
Semantic Notes: **1** SN101 is the ship notice line-item identification.
Comments: **1** SN103 defines the unit of measurement for both SN102 and SN104.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
M	**SN102**	**382**	**Number of Units Shipped**		**M**	**R 1/10**
			Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set			
M	**SN103**	**355**	**Unit or Basis for Measurement Code**		**M**	**ID 2/2**
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken			
			Refer to 004010 Data Element Dictionary for acceptable code values.			
	SN104	**646**	**Number of Units Shipped to Date**		**M**	**R 1/10**
			Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set – a CUM shipped quantity			

Segment: **PRF** **Purchase Order Reference**
Position: 050
Loop: HL Mandatory
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To provide reference to a specific purchase order
Syntax Notes:
Semantic Notes: **1** PRF04 is the date assigned by the purchaser to purchase order.
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
M	**PRF01**	**324**	**Purchase Order Number**		**M**	**AN 1/20**
			Identifying number for Purchase Order assigned by the orderer/purchaser			
	PRF02	**328**	**Release Number**		**O**	**AN 1/20**

Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction

Segment: **MEA** **Measurements**
Position: 080
Loop: HL
Level: Detail
Usage: Optional
Max Use: 40
Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)
Syntax Notes: At least one of MEA03 MEA05 MEA06 or MEA08 is required.
Semantic Notes: MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.
Comments: When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
	MEA01	**737**	**Measurement Reference ID Code**		**O**	**ID 2/2**
			Code identifying the broad category to which a measurement applies			
			PD	Physical Dimensions		
	MEA02	**738**	**Measurement Qualifier**		**O**	**ID 1/3**
			Code identifying a specific product or process characteristic to which a measurement applies			
			G	Gross Weight		
			N	Actual Net Weight		
			T	Tare Weight		
	MEA03	**739**	**Measurement Value**		**X**	**R 1/20**
			The value of the measurement			
	MEA04	**C001**	**Composite Unit of Measure**		**X**	
			To identify a composite unit of measure (See Figures Appendix for examples of use)			
M	**C00101**	**355**	**Unit or Basis for Measurement Code**		**M**	**ID 2/2**
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken			
			KG	Kilogram		
			LB	Pound		

This segment is used to indicate weight properties of the buyer part only

Segment: **REF** **Reference Identification**
Position: 150
Loop: HL Mandatory
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes: **1** At least one of REF02 or REF03 is required.
2 If either C04003 or C04004 is present, then the other is required.
3 If either C04005 or C04006 is present, then the other is required.
Semantic Notes: **1** REF04 contains data relating to the value cited in REF02.
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
M	**REF01**	**128**	**Reference Identification Qualifier**		**M**	**ID 2/3**
			Code qualifying the Reference Identification			
			KB	Beginning Kanban Serial Number		
			KP	This qualifier is used for Kanban Number.		
			LT	Lot Number		
	REF02	**127**	**Reference Identification**		**X**	**AN 1/30**
			Dock Number, Line Feed and/or Reserve Line Feed (when applicable)			

****This segment is used to reference either Kanban pull signals or lot numbers for the buyer part only****

SEGMENT: CLD Load Detail
LEVEL: Detail - Item
LOOP: HL/CLD **Repeat: 1**
USAGE: Optional
MAX USE: 1
PURPOSE: To specify the number and type of a container
COMMENT:
EXAMPLE: CLD*1*700* BIN52

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
M	**CLD01**	622	**Number of Loads** Number of customer-defined loads shipped by the supplier. This is the number of containers for this type.	**M**	**NO 1/5**
	CLD02	**382**	**Number of Units Shipped** Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set. Total item/part quantity per container.	**M**	**R 1/10**
	CLD03	**103**	**Packaging Code** Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material; if the Data Element is used, then Part 1 is always required. Any valid X12 code value except mutually defined**. This is the container code.**	**M**	**AN 3/5**

SEGMENT: REF Reference Identification
LEVEL: Detail - Item
LOOP: HL/CLD
USAGE: Optional
MAX USE: 200
PURPOSE: To specify identifying information
COMMENT:

Ref. Des.	Data Element	Name	Attributes
REF01	128	Reference Identification Qualifier	M ID 2/3
Code qualifying the Reference Identification **Either "LS" for serial number or "LT" for lot number**			
REF02	127	Reference Identification. The serial number or lot number value.	X AN 1/20

Segment: **ETD** **Excess Transportation Detail**
Position: 300
Loop: HL Mandatory
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify information relating to premium transportation
Syntax Notes: **1** If either ETD03 or ETD04 is present, then the other is required.
Semantic Notes: **1** ETD03 qualifies the authorization number given in EDT04.
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
M	**ETD01**	**626**	**Excess Transportation Reason Code**		**M**	**ID 1/2**
			Code identifying the reason for shipment via premium transportation rather than the normal mode of transportation			
			ZZ	Mutually Defined		
M	**ETD02**	**627**	**Excess Transportation Responsibility Code**		**M**	**ID 1/1**
			Code identifying the organization responsible for paying the premium transportation costs			
			Z	Mutually Defined		
	ETD03	**128**	**Reference Identification Qualifier**		**X**	**ID 2/3**
			Code qualifying the Reference Identification			
			ZZ	Mutually Defined		
	ETD04	**127**	**Reference Identification**		**X**	**AN 1/30**
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier. **This is the AETC number.**			

Segment: **CTT** **Transaction Totals**
Position: 010
Loop:
Level: Summary
Usage: Optional
Max Use: 1
Purpose: To transmit a hash total for a specific element in the transaction set
Semantic Notes:
Comments: **1** This segment is intended to provide hash totals to validate transaction completeness and correctness.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
M	**CTT01**	**354**	**Number of HL segments**		**M**	**N0 1/6**
			Total number of line items in the transaction set			
	CTT02	**347**	**Hash Total**		**O**	**R 1/10**
			Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element. Example: -.0018 First occurrence of value being hashed. .18 Second occurrence of value being hashed. 1.8 Third occurrence of value being hashed. 18.01 Fourth occurrence of value being hashed. --------- 1855 Hash total prior to truncation. 855 Hash total after truncation to three-digit field.		

Segment: **SE** **Transaction Set Trailer**
Position: 020
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
M	**SE01**	**96**	**Number of Included Segments**		**M**	**N0 1/10**
			Total number of segments included in a transaction set including ST and SE segments			
M	**SE02**	**329**	**Transaction Set Control Number**		**M**	**AN 4/9**
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set			

Generic Ship Notice Example

No containers being used

```
ISA*00*          *00*          *01*SWTESTSUPP5    *01*SWTESTCUST
*060608*1352*U*00401*000000041*0*T*~
GS*SH*SWTESTSUPP5*SWTESTCUST*20060608*1352*41*X*004010
ST*856*0001
BSN*00*77001363*20060608*1352
DTM*011*20060608*1256
DTM*017*20060608*1256
HL*1**S
MEA*PD*G*1504*LB
MEA*PD*N*1500*LB
TD5*B*2*SCAC
TD5****E
TD3*RR**RailCarNo
REF*BM*billOfLadingNo
REF*PK*shipperNo
REF*DK*dock1
N1*SU**1*supplierId
N1*ST**1*shipToId
N1*MI**92*facilityId
N1*SF**92*shipFromId
HL*2*1*O
LIN**BP*buyerPartNo*PO*poNumber1*EC*engineeringChg*RY*modelYear2012***KB*kbanPullSignalNo
SN1**800*EA*325200**EA
PRF*poNumber1*releaseNo
MEA*PD*N*1000*LB
MEA*PD*G*1100*LB
REF*KB*PullSignal1
REF*LT*LotNo1
ETD*ZZ*Z*ZZ*AetcNo
CTT*1*800
SE*44*0001
GE*1*41
IEA*1*000000041
```

Line Item with only Loose container

```
ISA*00*          *00*          *01*SWTESTSUPP5    *01*SWTESTCUST
*060608*1352*U*00401*000000041*0*T*~
GS*SH*SWTESTSUPP5*SWTESTCUST*20060608*1352*41*X*004010
ST*856*0001
BSN*00*77001363*20060608*1352
DTM*011*20060608*1256
DTM*017*20060608*1256
HL*1**S
MEA*PD*G*1504*LB
MEA*PD*N*1500*LB
TD5*B*2*SCAC
TD5****E
TD3*RR**RailCarNo
REF*BM*billOfLadingNo
REF*PK*shipperNo
REF*DK*dock1
N1*SU**1*supplierId
N1*ST**1*shipToId
N1*MI**92*facilityId
N1*SF**92*shipFromId
HL*2*1*O
LIN**BP*buyerPartNo*PO*poNumber1*EC*engineeringChg*RY*modelYear2012***KB*kbanPullSignalNo
SN1**800*EA*325200**EA
PRF*poNumber1*releaseNo
MEA*PD*N*1000*LB
MEA*PD*G*1100*LB
REF*KB*PullSignal1
```

```
REF*LT*LotNo1
ETD*ZZ*Z*ZZ*AetcNo
HL*3*2*I
LIN**LS*LOOSE CONTAINER
CLD*2*200*RTCXX
REF*LS*serialNo1
CTT*1*800
SE*44*0001
GE*1*41
IEA*1*000000041
```

Line Item with only Loose container

Master and Detail Container example

```
ISA*00*          *00*          *01*SWTESTSUPP5    *01*SWTESTCUST
*060608*1352*U*00401*000000041*0*T*~
GS*SH*SWTESTSUPP5*SWTESTCUST*20060608*1352*41*X*004010
ST*856*0001
BSN*00*77001363*20060608*1352
DTM*011*20060608*1256
DTM*017*20060608*1256
HL*1**S
MEA*PD*G*1504*LB
MEA*PD*N*1500*LB
TD5*B*2*SCAC
TD5****E
TD3*RR**RailCarNo
REF*BM*billOfLadingNo
REF*PK*shipperNo
N1*SU**1*supplierId
N1*ST**1*shipToId
N1*MI**92*facilityId
N1*SF**92*shipFromId
HL*2*1*O
LIN**BP*buyerPartNo*PO*poNumber1*EC*engineeringChg*RY*modelYear2012***KB*kbanPullSignalNo
SN1**800*EA*325200**EA
PRF*C1
MEA*PD*N*1000*LB
MEA*PD*G*1100*LB
REF*KB*PullSignal1
REF*LT*LotNo1
ETD*ZZ*Z*ZZ*AetcNo
HL*3*2*T
LIN**RC*RETURNABLE CONTAINER
CLD*2*200*RTC25
REF*LS*CJ1000009
HL*4*3*I
LIN**DT*DETAIL CONTAINER
CLD*2*200*RTCXX
REF*LS*CJ1000010
CTT*4*800
SE*44*0001
GE*1*41
IEA*1*000000041
```